



**Office of the Deputy Chief of Staff,  
G3  
Information Management Division**



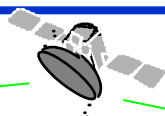
***HQ USAREUR  
Command and Control Personal Computer  
(C2PC)  
Observations***

- Mr. Mike Aquino
- HQUSAREUR G3-IMD
- DSN 314-370-7029
- [mike.aquino@us.army.mil](mailto:mike.aquino@us.army.mil)

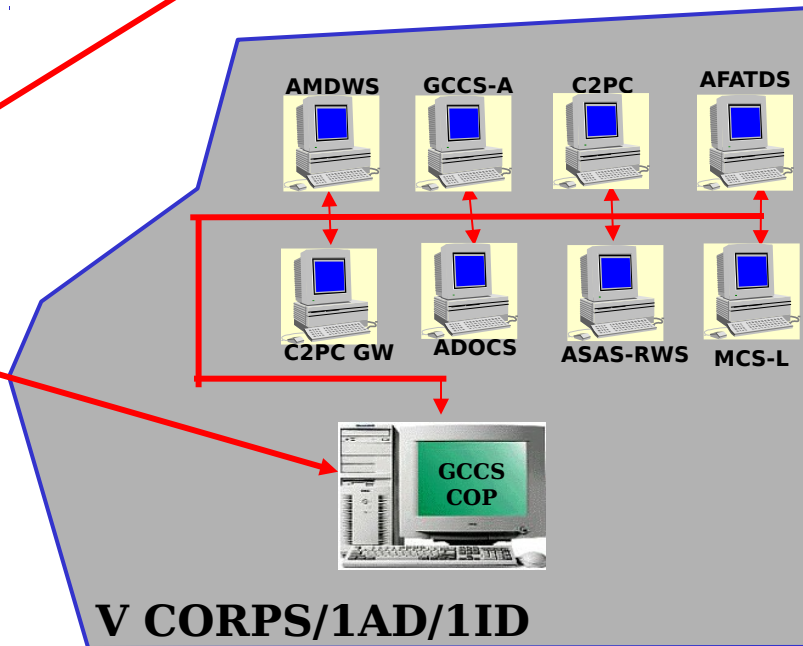
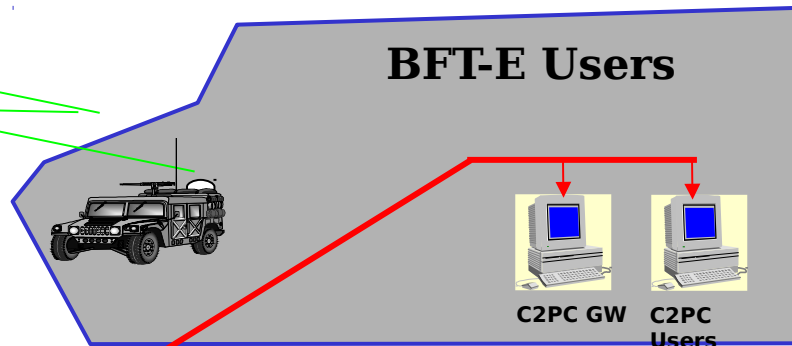
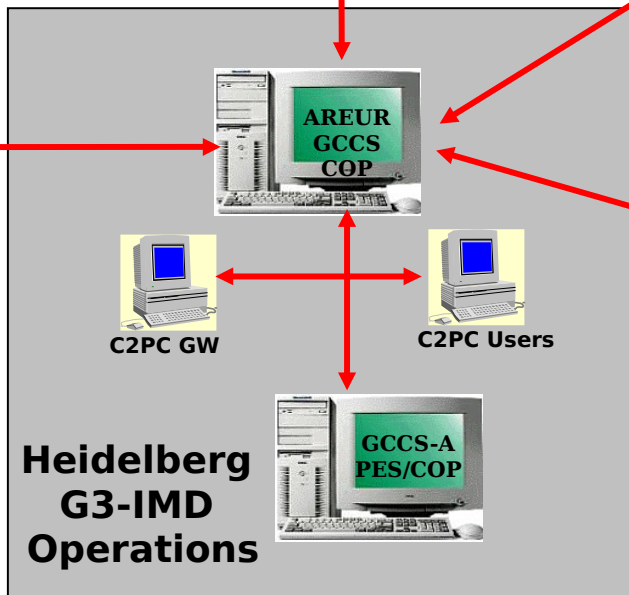
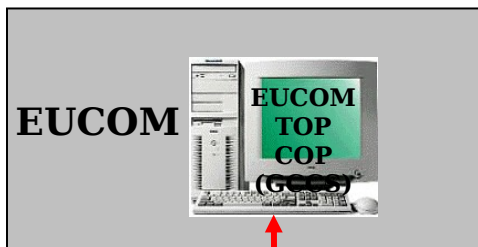
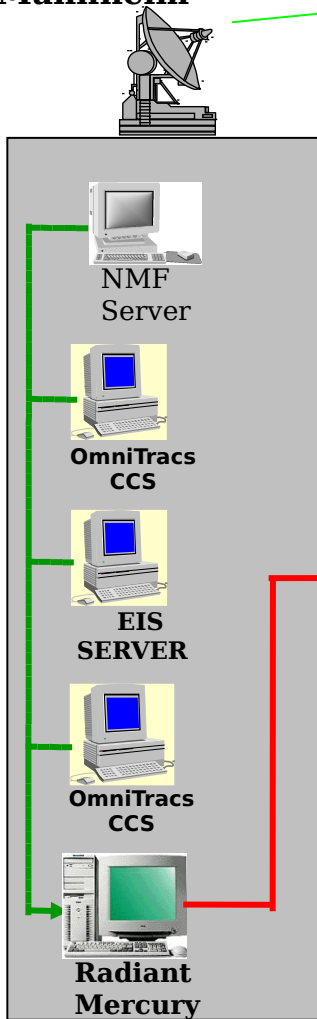


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- Issues/Recommendations
- Summary

# USAREUR GENERAL COP ARCHITECTURE



**Network Management Facility  
Mannheim**



— NIPRNET  
— SIPRNET



# General Observations

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- C2PC is the primary tool used to provide digital Situational Awareness throughout USAREUR units (HQ USAREUR, V CORPS, 1AD, 1ID, TFF, TFE).
  - C2PC is the TOC display of choice for situational awareness.
- C2PC is EASY to train/learn/support. A must for the battlefield.
- Excerpts from the V CORPS C4ISR Integration AAR for OIF:
  - The Global Command and Control System (GCCS) and Command and Control Personal Computer C2PC, fed by Blue Force Tracker (L-Band) and networked to receive intelligence information and Joint data feeds, served the V Corps well in this role during Operation Iraqi Freedom.
  - In some cases V Corps and 1 MEF forces who did not have Blue Force Tracking were able to use military and commercial GPS devices to track themselves by interfacing with C2PC loaded on a standard Laptop computer.
  - C2PC provided superb situational awareness during OIF.

# General Observations (cont)

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- Although ICSF will replace C2PC as the SA tool with GCCS-J 4.x, the majority of our users will continue to use C2PC as their situational tool since they will not have the hardware or network connectivity to make effective use of ICSF.
- C2PC (version 6.x) will remain the situational awareness application in GCCS-A block 4.
- Users like the capability to load their SA application on a standard base-lined PC. No need for specialized load or equipment.
- CENTCOM Coalition units have embraced C2PC in a big way. It is now incorporated into the base-line clone for all CENTRIXS Laptops. After MND SE (Brit zone) put up their digital screens they watched Tony Blair fly around on the Big Board. Tony Blair later came in and was provided an overview of the application - He was impressed. The brief was given by an Italian CPT which shows something of the commitment to C2PC by Coalition Forces.

# What Users Like

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- The Intel Office Application in conjunction with C2PC. The ability to query the MIDB and generate a C2PC overlay of Mosque, Hospital, Mass Grave sites, etc.. has been great!
- Ease of use. Unlike many other systems, you can train a user on the basic operations of the application in about 4 hours.
- Overlay tool
- The ability to “insert” objects into an overlay.
- Doesn’t require 40 contractors to operate a Corps network.
- C2PC can be installed and operated with minimal training required.
- The GPS receiver capabilities. A C2PC laptop combined with a commercial GPS unit can become an impromptu Blue Force Tracking device.

# What Users Like (cont.)

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- Mapping, Filters, and Plot options provide necessary tools to tailor the SA picture to meet specific requirements.
- The ability to create/save/display Multiple Map views with exclusive Map/Filter/Plot options is a great tool!
- Unit track groups (would be better if they were dynamic).
- TBMD
- The Auto Panning feature is great for tracking specific patrols!
- The ability to load imagery as the map background. “A picture is worth a thousand words”!
- The ability to switch map selection between quick draw and flexible draw. Users can easily select a particular map resolution or let the system auto-select it for them.
- The ability to print/plot maps (with or without tracks or overlays) to scale.

# Issues/Recommendations

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- Problem with TacticalObjects.mdb file becoming “corrupted”. Provide a GUI/button to perform the function of copying the sampletacticalobjects.mdb over TacticalObjects.mdb until this problem is resolved.
- TBMD module as part of the standard client install vice a custom install.
- C2PC not (as it does) allow - and / in unit names. This creates a problem when unit tracks are propagated to the GCCS COP server. These are not acceptable characters in the TDBM.
- Experienced inconsistencies with TBM alerts. Sometimes late, sometimes not at all.
- Switch between NTDS and 2525A without restarting C2PC.
- Set a Master Reference Point.



# Issues/Recommendations (cont.)

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- Support for SASO (Stability and Support Operations) graphics.
- Implement additional 2525B graphics.
- Provide seamless overlay graphic interchange between C2PC and other SA systems (MCS-L, ASAS-L, MCS, ADOCS, AMDWS, etc...).
- Dynamic track group capability. Commanders would like the ability to set track groups dynamically based on user defined parameters (name, unit, type, etc...) similar to search parameters with wild card options, and then be able to display that track group in a different color, icon, etc...
- Name (Long Name) and echelon as options in the Track Summary window.
- Provide function to readily view any applied filters, or to “turn off” all applied plot option filters. Given the numerous locations for setting various filters, users can “lose” track of what filters are set.

- OVERLAY MANAGEMENT

- Posting overlays to a web site has provided the best method of dissemination. DHCP, the volume of users, and the size of overlays makes C2PC Network hard to use. E-mail has also proven to be an ineffective means of overlay dissemination. The base overlay for OIF, without imbedded objects, was over 500K.
- Post baseline overlays to the gateway so that whenever a user connects to the gateway they would receive that overlay graphic. Baseline graphics changed daily and, although the use of TACWEB was easy, users could not keep up with the changes. The C2PC Network works well in a small environment, but not on something the size of what was done during OIF. There needs to be a pull solution vs. a push solution. Pushing graphics to users who have DHCP assigned IP addresses does not work, especially if they did not have their boxes turned on or weren't logged in.

# Issues/Recommendations (cont.)

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- 5.9.0.3 P4 runs great on Win2k but we saw problems on XP. Every problem was eventually traced to the local site, and their implementation of Domain Policy but any testing results would be appreciated. (Understand that version 6.x will work on XP).
- Locally change an individual track (icon). Example, Gen X wants to see his icon as an American flag.
- Problem with C2PC on Win2K systems with “blinking” icons when two or more maps are open and trackplot is active.
- Bulk import data from a external source to create overlay objects. Similar to the polyline import capability, but be able to designate each object as a particular entity (such as an obstacle).

# Summary

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- C2PC provided superb situational awareness during OIF.
- C2PC is a great Situational Awareness Tool. It's ease of installation and use, along with a nominal technical support requirement, have made it the USAREUR Situational Awareness tool of choice.
- The use of C2PC across the Joint environment has allowed for Joint Situational Awareness to a level that has not previously existed.
- C2PC, in conjunction with the BFT-E system, provides our commanders in the Balkans with the information needed to maintain visibility of their Patrols.
- From an Army perspective, C2PC is a good product and improved interoperability with Army Battle Command Systems (ABCS) would make it a great product.



# Questions/Comments?